

ATTACHMENT 4
SCUBA Survey Results

SCUBA Survey Results for Site 1 – April 12, 2013

Genus	Species	Common Name	Relative abundance¹
COELENTERATES			
<i>Halacampa</i>	<i>decemtentaculata</i>	dwarf sand-dwelling anemone	rare
<i>Metridium</i>	<i>farcimen</i>	plumose anemone	few
<i>Peachia</i>	<i>quinquecapitata</i>	jelly-dwelling anemone	rare
<i>Ptilosarcus</i>	<i>gurneyi</i>	sea pen	abundant
MOLLUSCA			
<i>Calliostoma</i>	<i>sp.</i>	topsnail	few
<i>Ceratostoma</i>	<i>foliatum</i>	leafy hornmouth	rare
<i>Evalea</i>	<i>tenuisculpta</i>	Odostome snail	few
<i>Clinocardium</i>	<i>nuttallii</i>	Nuttall's cockle	rare
<i>Tresus</i>	<i>capax</i>	fat gaper clam	rare
<i>Humalaria</i>	<i>kennerleyi</i>	Kennerly's venus clam shell	few
<i>Macoma</i>	<i>nasuta</i>	bent-nose macoma shell	few
<i>Saxidomus</i>	<i>giganteus</i>	butter clam shell	few
<i>Armina</i>	<i>californica</i>	striped nudibranch	few
<i>Dendronotus</i>	<i>albopunctatus</i>	white-spotted dendronotus	abundant
<i>Melibe</i>	<i>leonina</i>	hooded nudibranch	few
<i>Hermisenda</i>	<i>crassicornis</i>	opalescent nudibranch	abundant
ANNELIDA			
<i>Pista</i>	<i>sp.</i>	spaghetti worm	few
<i>Myxicola</i>	<i>sp.</i>	funnel shaped polychete	rare
-	-	sand worm tubes (unidentified tube worms)	abundant
-	-	parchment worm tubes (unidentified tube worms)	common
ARTHROPODA			
<i>Mysiidae</i>	-	<i>Mysiid</i> shrimp	common
<i>Balanus</i>	<i>sp.</i>	barnacles on shells	common
<i>Matacarcinus</i>	<i>magister</i>	Dungeness crab	few
<i>Pagurus</i>	<i>ochotensis</i>	Alaskan hermit	few
-	-	unidentified hermit crab	common
ECHINODERMS			
<i>Dermasterias</i>	<i>imbricata</i>	leather star	few
<i>Luidia</i>	<i>foliolata</i>	sand star	few
<i>Pisaster</i>	<i>brevispinus</i>	pink star	few
<i>Pycnopodia</i>	<i>helianthoides</i>	sunflower star	few
<i>Amphiodia</i>	<i>sp.</i>	cf. burrowing brittle star	abundant

¹ See table below for relative abundance scale

SCUBA Survey Results for Site 2 – April 12, 2013

Genus	Species	Common Name	Relative abundance¹
COELENTERATES			
<i>Halacampa</i>	<i>decemtentaculata</i>	dwarf sand-dwelling anemone	rare
<i>Metridium</i>	<i>farcimen</i>	plumose anemone	few
<i>Peachia</i>	<i>quinquecapitata</i>	jelly-dwelling anemone	rare
<i>Ptilosarcus</i>	<i>gurneyi</i>	sea pen	abundant
MOLLUSCA			
<i>Calliostoma</i>	<i>sp.</i>	topsnail	few
<i>Ceratostoma</i>	<i>foliatum</i>	leafy hornmouth	rare
<i>Evalea</i>	<i>tenuisculpta</i>	Odostome snail	few
<i>Clinocardium</i>	<i>nuttallii</i>	Nuttall's cockle	rare
<i>Tresus</i>	<i>capax</i>	fat gaper clam	rare
<i>Humalaria</i>	<i>kennerleyi</i>	Kennerly's venus clam shell	few
<i>Macoma</i>	<i>nasuta</i>	bent-nose macoma shell	few
<i>Saxidomus</i>	<i>giganteus</i>	butter clam shell	few
<i>Armina</i>	<i>californica</i>	striped nudibranch	few
<i>Dendronotus</i>	<i>albopunctatus</i>	white-spotted dendronotus	abundant
<i>Melibe</i>	<i>leonina</i>	hooded nudibranch	few
<i>Hermisenda</i>	<i>crassicornis</i>	opalescent nudibranch	abundant
ANNELIDA			
<i>Pista</i>	<i>sp.</i>	spaghetti worm	few
<i>Myxicola</i>	<i>sp.</i>	funnel shaped polychaete	rare
-	-	sand worm tubes (unidentified tube worms)	abundant
-	-	parchment worm tubes (unidentified tube worms)	common
ARTHROPODA			
<i>Mysiidae</i>	-	<i>Mysiid shrimp</i>	common
<i>Balanus</i>	<i>sp.</i>	barnacles on shells	common
<i>Matacarcinus</i>	<i>magister</i>	Dungeness crab	few
<i>Pagurus</i>	<i>ochotensis</i>	Alaskan hermit	few
-	-	unidentified hermit crab	common
ECHINODERMS			
<i>Dermasterias</i>	<i>imbricata</i>	leather star	few
<i>Luidia</i>	<i>foliolata</i>	sand star	few
<i>Pisaster</i>	<i>brevispinus</i>	pink star	few
<i>Pycnopodia</i>	<i>helianthoides</i>	sunflower star	few
<i>Amphiodia</i>	<i>sp.</i>	cf. burrowing brittle star	abundant

¹ See table below for relative abundance scale

Relative Abundance	Definition
rare	observed only one or two times during the survey
few	observed three to several times
common	observed eight to twenty times
abundant	observed more than twenty times